



Flood Lines

Fall 2019

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Now Available! The New Hampshire Flood Hazards Handbook for Municipal Officials

The Flood Hazards Handbook for Municipal Officials is now available for download! This new guide developed by the [NH Silver Jacket Team](#) was designed specifically for NH local officials to help them prepare for, respond to, and recover from floods. Here's a sampling of the many topics covered:

- ◆ Identification of local flood risks
- ◆ FEMA hazard mitigation assistance grants
- ◆ Evacuation and sheltering guidance
- ◆ Post-flood requirements for NFIP communities, including the Substantial Damage rule
- ◆ FEMA post-disaster assistance and other potential sources of assistance for communities, businesses, and residents
- ◆ Mitigation resources to increase resilience to future floods
- ◆ Public outreach guidance, including key topics to communicate to residents before, during, and after a flood

Also included is a customizable Flood Response and Recovery Checklist which can be used by municipal officials to identify and manage priority activities when a flood does happen.

Download a free copy of the Flood Hazards Handbook from the [New Hampshire Silver Jackets Team website](#) and learn how it can help you shape a more flood-resilient future for your community!



Psst—need some training? NHOSI will be holding several free NFIP-related training workshops this fall for community officials. See page 7 for details!

New State Building Code in Effect as of September 15th: New Floodplain Provisions Included!

On September 15, [an updated State Building Code took effect](#) in New Hampshire which includes the 2015 editions of the International Building Code (IBC), the International Residential Code (IRC), and other parts of the International Code (I-Code) series, as amended by the State. The new codes include requirements for new and Substantially Improved structures in the Special Flood Hazard Area that exceed the minimum requirements of the NFIP. Some of the key changes are summarized below:



- ◆ For all new construction and Substantial Improvements of residential structures in Zones A, AE, and AO, the lowest floor elevation must be the Base Flood Elevation (BFE) plus 1 foot or higher. (IRC R322.2.1)
- ◆ For all new construction and Substantial Improvements of residential structures in Zone VE, the elevation of the lowest horizontal structural member must be the BFE plus 1 foot or higher. (IRC R322.3.2)
- ◆ New construction and Substantial Improvements of residential structures in Coastal A Zones must meet Zone V requirements. (Stem wall foundations are acceptable if they meet specific requirements.) (IRC R322.3) *[Note that there are no Coastal A Zones designated on the FEMA Flood Insurance Rate Maps (FIRMs) in NH currently. That will change when the preliminary FIRMs for Rockingham County become effective.]*
- ◆ Breakaway walls installed on buildings in Zone VE below the BFE must have compliant flood openings. (IRC R322.3.4)

FEMA has several good resources that describe all of the flood resistant provisions of the 2015 I-Codes which you can find on [this page](#). You can also view the entire 2015 [IRC here](#) and [IBC here](#) but you cannot print them for free.



Publication Spotlight: *Variances and the National Flood Insurance Program*

Here we highlight publications that may not be brand new but still are great resources with important information for floodplain managers and others.

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Granting a variance to your community's floodplain management regulations is not encouraged since it can increase the risk to life and property in nearby areas when a flood happens. However, occasionally there may be a legitimate reason to issue such a variance. FEMA's publication [Variances and the National Flood Insurance Program](#) covers each NFIP variance criterion included in your community floodplain regulations in detail and outlines common situations in which a variance may be requested. [Check it out online](#) or [order free hard copies from FEMA](#) today. And don't forget: a variance will also need to meet state variance criteria in RSA 674:33!



Floodplain Management Bulletin
Variances and the National Flood Insurance Program
FEMA P-993 / July 2014



Recent and Upcoming NFIP Flood Insurance Manual Changes

FEMA previously announced NFIP changes that went into effect on October 1, 2019. These changes are related to the requirement for National Producer Numbers, specific rating guidelines, and the Community Rating System Eligible Communities List. Learn more in [this short video](#) or read all about them [here](#).

FEMA also [announced changes](#) scheduled to go into effect on April 1, 2020 and January 1, 2021 including updated premium rates and floodproofing guidance for non-residential buildings, among other things. These program changes may be subject to future update or modification due to the Risk Rating 2.0 project (See below).

Risk Rating 2.0

The NFIP's new flood insurance risk rating system, called "Risk Rating 2.0" is currently under development. FEMA has released an [overview fact sheet](#) and [FAQ](#) that provide details about the project. Risk Rating 2.0 will fundamentally change how FEMA rates a property's flood risk and prices insurance for buildings. The new rates for all single-family homes will go into effect nationwide on October 1, 2020.

NFIP Reauthorization

In order for the NFIP to continue to operate, the program was required to be reauthorized by Congress by September 30, 2017. On September 27, 2019 after many other short term authorizations occurring since that deadline, the President signed legislation passed by Congress authorizing the program until November 21, 2019. Congress has remained deadlocked on moving forward with a number of bills proposing long-term reform of the NFIP as a program since last year. FEMA's [NFIP Reauthorization webpage](#) provides the latest on the status of the reauthorization.

Revised NFIP Technical Bulletins 0, 4, and 8 Now Available

FEMA is updating its entire [NFIP Technical Bulletin \(TB\) series](#). The bulletins are primarily for use by state and local officials responsible for interpreting and enforcing building codes and NFIP regulations but can be useful for others including property owners and contractors. The following updated TBs are now available:

- [TB 0, User's Guide to Technical Bulletins](#)
- [TB 4, Elevators in Buildings Located in Special Flood Hazard Areas](#)
- [TB 8, Corrosion Protection for Metal Connectors and Fasteners in Coastal Areas](#)

Learn about the changes that have been made to these (and forthcoming) updated bulletins by reading [FEMA's fact sheet](#) on the subject.



This summer a FloodSmart rubber ducky tagged along with NHOSI's Steve Walker on his vacation to Maine. Attend one of NHOSI's upcoming training workshops (See page 7) and you may be the lucky recipient of a FloodSmart ducky yourself!

**Get your ducks in a row.
Get flood insurance.
[FloodSmart.gov/duck](https://www.floodsmart.gov/duck)**

Community Rating System (CRS) Update

Next NH CRS Users Group Meeting is Monday, November 4th

The next NH CRS Users Group Meeting is set for November 4th in Concord. Is your community interested in learning more about CRS and whether this program may be a good fit? Consider attending! This group includes communities already in CRS, communities who would like to join, as well as communities who are just interested in learning more about the program. Contact Samara Ebinger of NHOSI (samara.ebinger@osi.nh.gov or 603-271-1755) if you'd like to attend the November meeting or to be added to our NH CRS Users Group email distribution list.

Upcoming CRS Webinars

Below are upcoming, free CRS webinars. Many of the courses are eligible for CECs for Certified Floodplain Managers (CFMs). To register, visit the [NFIP Training website](#) and click the "Upcoming" tab. When asked during registration which FEMA Region you are in, reply "1".

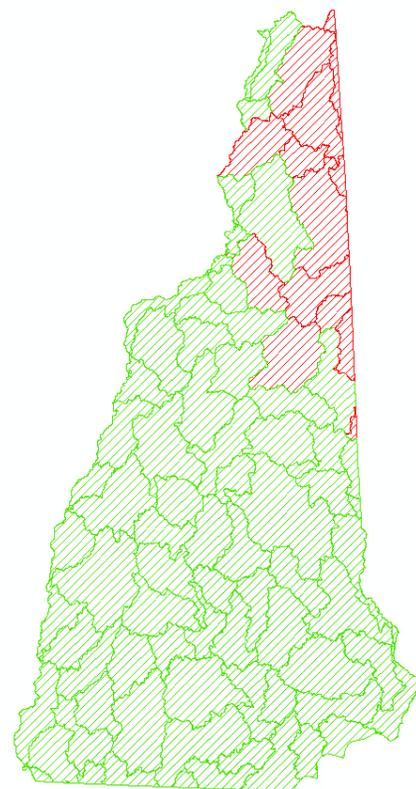
- Introduction to CRS (November 19, 1:00-2:00 pm)
- CRS and Coastal Hazards (November 20, 1:00-2:00 pm)

GIS Resources For Floodplain Managers: Detailed Topographic Data

Detailed topographic data has many uses—it can be used to create floodplain mapping or assess proposed development sites in floodprone areas, among many other things. [NH GRANIT](#) is in the process of developing 2 foot topographic contour line GIS shapefiles for the entire state of New Hampshire* using highly detailed [Light Detection and Ranging Data \(LiDAR\) data](#). These contour datasets are already available for much of the state (see map at right).

The available contour shapefiles can be downloaded from the NH GRANIT website [here](#). You'll notice that the contour data is divided into different data sets by watershed boundary. For example, the first dataset on the page is named "Middle Salmon Falls River (010600030506)" - this refers to what is called a "HUC-12" hydrologic watershed boundary.

So how can you tell which contour dataset is the one you need for your area? First download the shapefile on the NH GRANIT website called "Level 6 Hydrologic Unit Boundaries for New Hampshire" (accessible [here](#)). Then use your GIS software to overlay the shapefile with your other datasets to find the watershed boundary (or boundaries) that apply for the area you're interested in. Then look at the values in the attribute table for that boundary for the fields "HU_12_DS" or "HU_12_NAME" and match either one of those to the name of a contour shapefile dataset on the NH GRANIT website. Note that the hydrologic unit boundaries dataset is a bit old so some of the codes or names may not match up exactly (but most seem to).



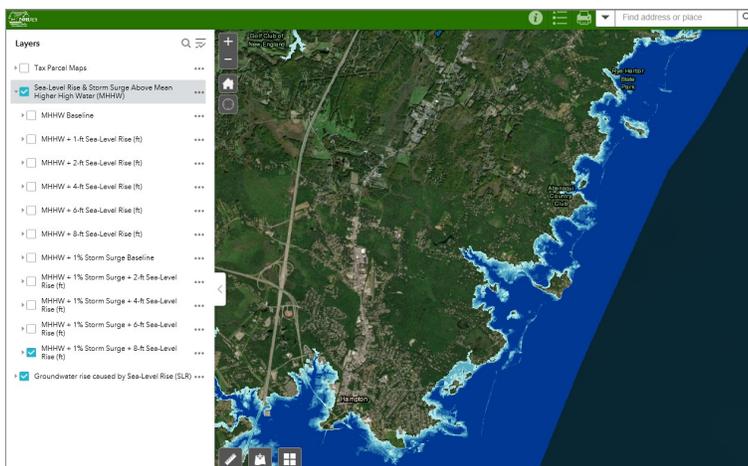
Green areas already have the 2 foot topographic contour data available on the NH GRANIT website. Red areas are currently in process. (Map courtesy of NH GRANIT)

*In steep, high relief areas, 10 foot contours will be generated instead.

New Publications and Resources Available!

◆ [NH Coastal Flood Risk Summary and Sea-Level Rise Mapper](#)

The NH Department of Environmental Services convened representatives of other state agencies, planning commissions, and UNH to supervise an update of storm surge, sea-level rise, precipitation, and other relevant projections originally summarized in the 2014 report, *“Sea-level rise, storm surges, and extreme precipitation in coastal New Hampshire: Analysis of past and projected future trends.”* The 2019 NH Coastal Flood Risk Summary is comprised of two parts: [Part I](#) summarizes best available science relevant to coastal flooding in NH and includes updated projections for relative sea-level rise, coastal storms, groundwater rise, and extreme precipitation. [Part II](#) provides draft guidance for using the scientific projections of coastal flood risks. It presents overarching principles and a step-by-step approach for incorporating projections for relative sea-level rise, coastal storms, groundwater rise, and extreme precipitation into state and local land use planning and decision-making. It also includes tools to facilitate the use of the scientific projections, including a worksheet and a [Sea-Level Rise Mapper](#).



◆ [FEMA Benefit-Cost Analysis Toolkit, Version 6.0](#)

FEMA recently released a new version of its Benefit Cost Analysis (BCA) Toolkit. BCA is the method by which the future benefits of a hazard mitigation project are determined and compared to its costs. FEMA requires a BCA to validate cost effectiveness of proposed hazard mitigation projects prior to funding. Some major features of the new version (6.0) include:

- Excel-based platform
- Compatible with both Windows and Mac operating systems
- Streamlined user interface and improved user experience
- Reduction in the number of manual-input data fields
- Improved help content
- Improved report formatting

◆ [Regional Resilience Toolkit: 5 Steps to Build Large Scale Resilience to Natural Disasters](#)

FEMA and the Environmental Protection Agency partnered with the Metropolitan Transportation Commission/Association of Bay Area Governments (California) to create the Regional Resilience Toolkit that can help regions plan for disasters by working across multiple jurisdictions and with non-governmental partners.

◆ [FEMA 2018 National Household Survey \(NHS\) on Individual and Community Preparedness](#)

Every year, FEMA surveys the American public to assess how the culture of personal disaster preparedness and resilience has changed over time. The NHS also measures individuals' attitudes and behaviors regarding preparedness and assesses what influences them to begin preparing for a future hazard. Estimates from the 2018 NHS suggest that an increasing percentage of the American public are actively preparing for disasters.

◆ [What to do with Dams: an Assessment of Public Opinion to Inform the Debate in New Hampshire](#)

The University of New Hampshire recently released results from statewide surveys that explore public views about dam removal.

Floodplain Administrator 101 Training Workshops

NHOSI is holding free Floodplain Administrator 101 training workshops for local officials in November and December (See locations and dates below). These workshops are intended for community officials who administer and enforce floodplain regulations, review permit applications, issue permits for development in floodplain areas, and for others interested in learning more about a community's responsibilities as a participant in the NFIP. Each workshop will provide information about the NFIP, FEMA floodplain maps, key floodplain regulations, the floodplain permitting process, and responsibilities of a community in order to remain in good standing in the NFIP. (Each workshop will include the same content.) To RSVP, please contact Samara Ebinger of NHOSI at samara.ebinger@osi.nh.gov or 603-271-1755 and indicate which date/location you'd like to attend.

- **November 7th, 1pm—4pm, Lancaster**
Lancaster Town Hall, 25 Main Street, Lancaster
- **Early December, Keene**
Stay tuned for details—they'll be announced soon through the Flood Lines email listserv!

NHOSI Presenting on NFIP Topics at Upcoming Conferences

NHOSI Floodplain Management Program staff will be presenting at two upcoming conferences this fall on NFIP-related topics:

- ♦ "Floodplain Development Permitting: Requirements and Best Practices for Communities that Participate in the NFIP", [NH Municipal Association Annual Conference](#), November 14th, Manchester
- ♦ "Surveying in Floodplains Workshop", [NH Land Surveyors Association](#) Annual Conference, December 6th, Concord

Managing Floodplain Development Through the NFIP Course

FEMA Region I and the State of Connecticut are offering a 4-day introductory training course on the NFIP on December 9-12th in New London, Connecticut. The cost is \$45. Certified Floodplain Managers can receive 12 Continuing Education Credits for attendance. More details on the class, including how to register are available [here](#). Registrations must be received by November 18th.

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